

# Claims

- [c1] A wheelchair braking device comprising:
- a support structure;
  - a sensing lever pivotably mounted to the support structure for rotational movement in oppositely-disposed first and second rotational directions;
  - braking means slidably mounted to the support structure for movement in oppositely-disposed first and second linear directions;
  - means for biasing the braking means in the first linear direction;
  - means for interconnecting the sensing lever and the braking means, the interconnecting means causing the biasing means to bias the sensing lever in the first rotational direction, the interconnecting means causing the braking means to move in the second linear direction when the sensing lever is caused to rotate in the second rotational direction.
- [c2] The wheelchair braking device according to claim 1, wherein the support structure comprises a bar having a longitudinal length terminating with oppositely-disposed first and second ends, each of the first and second ends

having means for attaching the bar to a wheelchair.

- [c3] The wheelchair braking device according to claim 2, wherein the sensing lever is pivotably mounted to the bar so as to rotate about an axis transverse to the longitudinal length of the bar.
- [c4] The wheelchair braking device according to claim 1, wherein the sensing lever is pivotably mounted to the support structure so as to rotate about an axis transverse to the support structure.
- [c5] The wheelchair braking device according to claim 1, wherein the sensing lever comprises means for engaging a wheelchair seat, the engaging means moving in upward and downward directions when the sensing lever moves in the first and second rotational directions thereof, respectively.
- [c6] The wheelchair braking device according to claim 1, wherein the interconnecting means is a link pivotably connected at a first end thereof to the sensing lever and pivotably connected at a second end thereof to the braking means.
- [c7] The wheelchair braking device according to claim 1, wherein the biasing means comprises a spring having a first end attached to the braking means and a second

end attached to the support structure.

- [c8] The wheelchair braking device according to claim 1, wherein the braking means comprises a block slidably coupled to the support structure and a cantilevered member mounted to and extending from the block in a transverse direction to the first and second linear directions.
- [c9] The wheelchair braking device according to claim 1, wherein the braking device is mounted to a wheelchair with multiple wheels, the support structure being located along one of the wheels of the wheelchair and oriented in a fore-aft direction relative to the wheelchair.
- [c10] A wheelchair having a seat, multiple wheels, and at least two braking devices, each of the braking devices comprising:
  - a sensing lever pivotably mounted to the wheelchair so that a first end of the sensing lever is movable in upward and downward directions while contacting the seat of the wheelchair;
  - braking means slidably mounted relative to the wheelchair for engaging one of the wheels of the wheelchair;
  - means for biasing the braking means into engagement with the one wheel of the wheelchair;

means for interconnecting the sensing lever and the braking means, the interconnecting means causing the biasing means to bias the first end of the sensing lever in the upward direction, the interconnecting means causing the braking means to move out of engagement with the one wheel when the first end of the sensing lever is caused to move in the downward direction.

- [c11] The wheelchair according to claim 10, wherein the sensing lever is pivotably mounted relative to the wheelchair so as to rotate about a horizontal axis.
- [c12] The wheelchair according to claim 10, further comprising a support structure having oppositely-disposed first and second ends, each of the first and second ends being coupled to the wheelchair, wherein the sensing lever is pivotably mounted to the support structure so as to rotate about a horizontal axis.
- [c13] The wheelchair according to claim 12, wherein the biasing means comprises a spring having a first end attached to the braking means and a second end attached to the support structure.
- [c14] The wheelchair according to claim 12, wherein the braking means comprises a block slidably coupled to the support structure and a cantilevered member mounted

to and extending from the block for engagement with the one wheel of the wheelchair.

- [c15] The wheelchair according to claim 14, wherein the support structure comprises a bar located along the one wheel of the wheelchair and oriented in a fore-aft direction of the wheelchair.
- [c16] The wheelchair according to claim 10, wherein the braking means is slidably mounted relative to the wheelchair for movement in fore and aft directions of the wheelchair.
- [c17] The wheelchair according to claim 16, wherein the biasing means causes the braking means to move in the aft direction to engage the one wheel of the wheelchair.
- [c18] The wheelchair according to claim 16, wherein the sensing lever and the interconnecting means are operable to cause the braking means to move in the fore direction to disengage the one wheel of the wheelchair when the first end of the sensing lever moves in the downward direction thereof.
- [c19] The wheelchair according to claim 10, wherein the sensing lever comprises means for engaging the seat of the wheelchair, the engaging means moving in the upward and downward directions with the first end of the sens-

ing lever.

[c20] The wheelchair according to claim 10, wherein the inter-connecting means is a link pivotably connected at a first end thereof to the sensing lever and pivotably connected at a second end thereof to the braking means.